Claims

[c1]   A method for scheduling activities and/or work consistent with an entity's strategic objective, wherein said method comprises the steps of:

a. defining the strategic objectives;

b. prioritizing the said strategic objectives;

c. selecting the primary strategic objective;

d. listing the possible measures for the said primary strategic objective;

e. selecting the primary strategic objective measure;

f. scheduling all of the independent jobs and/or orders;

g. defining the possible measures to be used for scheduling work consistent with the said primary strategic objective measure;

h. selecting a primary measure for said scheduling of work consistent with the said primary strategic objective measure;

i. defining the possible constraints for scheduling said work;

j. selecting the constraint by which said work will be scheduled;

k. prioritize the order of the constraints to schedule said work by;

l. calculating the said work schedule measure for each said job and/or order in the work queue for the said prioritized constraint;

m. sorting the dependant jobs and/or orders based upon the said work schedule measures with the said job and/or order that has the largest positive impact on the said work schedule measure first;

n. scheduling the job and/or order with the said largest positive impact on the said work schedule measure on the said prioritized constraint first; and

o. repeating steps k through n for each of the said constraints until all of the said constraints and all of the said jobs and/or orders have been scheduled.

[c2] A method as recited in claim 1 [c1] , wherein the said method of prioritizing the order of the constraints comprises the additional steps of:

a. removing the said scheduled job and/or order from the said work queue; and

b. adding the impact of the said work schedule measure from the said scheduled job and/or order to the said impact of each of the said jobs and/or orders remaining in the said work queue.

[c3] A method as recited in any one of claims 1 through 2 [c1][c2] , wherein the said method of prioritizing the order of the constraints comprises the additional steps:

a. identifying the possible desired strategic objective result measures;

b. selecting one of the said desired strategic result measures;

c. calculating the said selected strategic result measure for each of the said constraints; and

d. prioritizing the said selected strategic result measures for each of the said constraints with the said constraint having the largest positive impact being first.

[c4]   A method as recited in any one of claims 1 through 3 [c1][c2][c3] wherein any strategic objective is used.

[c5]   An apparatus for scheduling work consistent with an entity's strategic objective, wherein said apparatus includes:

a. a memory that stores computer-readable code;

b. a processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said code configured to:

i. calculate the desired strategic objective result measure for each constraint for the planning period;

ii. prioritize the said calculated strategic objective result measures for scheduling work;

iii. calculate the work schedule measure for each job and/or order in the work queue for the prioritized constraints;

iv. schedule all of the independent jobs;

v. sort the dependant jobs and/or orders of the highest

priority constraint based upon the said work schedule measures with the said jobs and/or orders having the largest positive impact on the said work schedule measure first;

vi. scheduled the said dependant job and/or order with the said largest positive impact first; and

vii. repeating steps i through vi until all of the said constraints and all of the said jobs and/or orders have been scheduled for the planning period.

[c6] An apparatus as recited in claim 5 [c5] , wherein the said apparatus includes a said processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said code configured to:

a. remove the said scheduled job and/or order from the said work queue; and

b. add the said impact of the said scheduled job and/or order to the said impact of the jobs and/or orders remaining in the said job and/or order queue.

[c7] An apparatus as recited in any one of claims 5 through 6 [c5] [c6] , wherein the said apparatus includes a said processor operatively coupled to said memory, said processor configured to implement said computer-readable code, said code configured to:

a. calculate the strategic objective result measure for each

said constraint; and

b. prioritize the said constraints by the largest positive impact to the said strategic objective result measure being first.

[c8] An apparatus as recited in any one of claims 5 through 7 [c5][c6] [c7] wherein any strategic objective is used.

[c9] A computer program embodied on a computer-readable medium for determining the sequence or order for scheduling activities or work that is consistent with and supportive of the entity's primary strategic objective such that the operational side of the entity is supporting and consistent with the said strategic direction of the entity, wherein said determination comprises a data structure instantiating code segment that establishes a storage record in memory having:

> a. the calculations for the primary strategic objective measure and for the work schedule measure that are consistent;
>
> b. prioritized constraints for scheduling work by;
>
> c. the calculated work schedule measure for each said activity or work in the work schedule for the said prioritized constraints;
>
> d. a work schedule of the dependant activities or work in the said work schedule, sorted by the activity or work with the largest impact on the said work schedule measure of the

said prioritized constraints first; and

e. repeating steps i through iv for each of the said constraints until all of the said constraints and all of the said activities or work have been scheduled.

[c10]   A computer program embodied on a computer-readable medium as recited in claim 9 [c9] , wherein the said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory that:

a. has removed the scheduled activity or work; and

b. adds the impact of the said work schedule measure from the said scheduled activity and/or work to the said impact of each of the said activities and/or work remaining in the said work queue.

[c11]   A computer program embodied on a computer-readable medium as recited in any one of claims 9 through 10 [c9][c10] , wherein the said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory that:

a. calculates the selected strategic result measure for each of the said constraints; and

b. prioritizes the said selected strategic result measures for each of the said constraints with the said constraint having the largest positive impact being first.

[c12]   A computer program embodied on a computer-readable medium

as recited in any one of claims 9 through 11 [c9][c10][c11] , wherein the said new order and/or lot size comprises a data structure instantiating code segment that establishes a storage record in memory wherein any strategic objective is used.

[c13]   A device and system for scheduling activities and/or work consistent with an entity's strategic objective, said device and system comprising:

   a. a means for defining the strategic objectives;

   b. a means for prioritizing the said strategic objectives;

   c. a means for electing the primary strategic objective;

   d. a means for listing the possible measures for the said primary strategic objective;

   e. a means for selecting the primary strategic objective measure;

   f. a means for scheduling all of the independent jobs and/or orders;

   g. a means for defining the possible measures to be used for scheduling work consistent with the said primary strategic objective measure;

   h. a means for selecting a primary measure for said scheduling of work consistent with the said primary strategic objective measure;

   i. a means for defining the possible constraints for scheduling said work;

j. a means for selecting the constraint by which said work will be scheduled;

k. a means for prioritize the order of the constraints to schedule said work by;

l. a means for calculating the said work schedule measure for each said job and/or order in the work queue for the said prioritized constraint;

m. a means for sorting the dependant jobs and/or orders based upon the said work schedule measures with the said job and/or order that has the largest positive impact on the said work schedule measure first;

n. a means for scheduling the job and/or order with the said largest positive impact on the said work schedule measure on the said prioritized constraint first; and

o. a means for repeating steps k through n for each of the said constraints until all of the said constraints and all of the said jobs and/or orders have been scheduled.

[c14]   The means of claim 13 [c13] , wherein the said means of prioritizing the order of the constraints comprises:

a. a means for removing the said scheduled job and/or order from the said work queue; and

b. a means for adding the impact of the said work schedule measure from the said scheduled job and/or order to the said impact of each of the said jobs and/or orders remaining

in the said work queue.

[c15] The means of any one of claims 13 through 14 [c13][c14] , wherein the said means of prioritizing the order of the constraints comprises:

a. a means for identifying the possible desired strategic objective result measures;

b. a means for selecting one of the said desired strategic result measures;

c. a means for calculating the said selected strategic result measure for each of the said constraints; and

d. a means for prioritizing the said selected strategic result measures for each of the said constraints with the said constraint having the largest positive impact being first.

[c16] The means as recited in any one of claims 13 through 15 [c13] [c14][c15] wherein any strategic objective is used.